

MIKHAYLOVSKAYA, I. S.

"Characteristics of the Adaptative Evolution of the Chinese Lemon."
Sub 5 Mar 51, Moscow State Pedagogical Inst imeni V. I. Lenin.

Dissertations presented for science and engineering degrees in
Moscow during 1951.

SO: Sum. No. 480, 9 May 55

MIKHAYLOVSKAYA, I.S.

Age changes in the anatomical structure of taproots in some
species of Leguminosae. Bot.shur. 45 no.6:875-880
Je '60. (MIRA 13:7)

1. Moskovskiy gosudarstvennyy pedagogicheskiy institut im.
V.I.Lenina.
(Leguminosae) (Roots(Botany)--Anatomy)

Mikhailov, V.S.

Change in the anatomical structure of some grass roots as
related to their aging. Biul. MOIP. Otd. biol. 70 no.3:
81-86 My-Je '65. (MIRA 18:10)

KOLEV, A.A.; MIKHAJLOVSKAYA, I.Ye.; SALGANIK, R.I., kand. biol. nauk

Use of deoxyribonuclease for the treatment of virus diseases
of eyes. Izv. SO AN SSSR no.8 Ser. biol.-med. nauk no.2:145-
146 '64 (MIRA 18:1)

1. Novosibirskiy meditsinskiy institut, i Institut tsitologii
i genetiki Sibirskego otdeleniya AN SSSR, Novosibirsk.

NIKHAYLOVSKAYA, K.P.

Using electronic oscillographs in measuring a.c. parameters.
Ism.tekh. 20 no.1:42-43 Ja '59. (MIRA 11:12)
(Oscillograph) (Electric current, Alternating--Measurement)

MIKHAYLOVSKAYA, K.P.

Using oscillographs in measuring impedance. Izm.tekh. no.9:
35-37 S '60. (MIRA 13:9)
(Impedance (Electricity)--Measurement)

MIKHAYLOVSKAYA, K.P., starshiy prepodavatel'

Measurement of complex impedances by means of a phase comparison technique used in determining the electric parameters of lumber. Trudy STI 34:63-72 '63. (MIRA 17:2)

MIKHAYLOVSKAYA, K.P., inzh.

Heating wood with industrial frequency currents. Der. prem. li no. 2:
12-14 Ag '62. (MIRA 17:2)

1. Sibirskiy tekhnologicheskiy institut.

MIKHAYLOVSKAYA, K.P., starshiy prepodavatel'

Some characteristics of the electric properties of lumber
at a frequency of 50 hertz. Trudy STI 34:41-47 '63.
(MIRA 17:2)

The iodine content of White Sea water. A. Skopintsev
and L. Mikhalevskaya. *Trans. Oceanographic Inst.*
Moscow 3, 79, 1911 (1921) (English summary). *Newsp. Labch.
Mineral. God.*, Referate II, 1835, 228. Chem. analyses
show that the I content of the White Sea is less than the
av. of Keith (cf. "A" 24, 1817) for northern seas. This
is due to the lower salt content of the White Sea water.
J. P. Schaefer

MIKHAYLOVSKAYA, L A

The hydrochemical characteristics of the Moscow River
from Zvenigorod to Kolomna in August, 1934. II. A
Skopintsev and L A Mikhaylovskaya //vidensk
Akademii SSSR // 1935 // 1936. The effect of
Mazurin // S S R // 1935 // 1936. The effect of
the city of Moscow in increasing the salts and bacteria in
the river is shown.

AIA-31-A METALLURGICAL LITERATURE CLASSIFICATION

CA MIKHAYLOVSKAYA, L A

14

A qualitative characterization of the organic substances in natural waters. B. V. Skopintsev and I. A. Mikhaylovskaya. (Hydrochim. Inst. Novocherkassk. *Vidzhotom Materials*) Hydrochim. Materials. 14, 108-116 (1948)

Tests in alk., neutral, and acid media were made for the oxidizing power and B.O.D. of a series of water samples waste from slaughter houses, starch molasses plant, distilleries, potato starch plant, rivers, ground waters, and reservoirs. Natural waters rich in org. matter which is of the unstable type (in the B.O.D. sense), such as pollution or plankton growth, have a higher oxidation index in alk. than in acid media. Such waters have a higher B.O.D. in comparison with the oxidation index. Waters containing practically none of such org. substances have a low B.O.D. factor in comparison with the oxidation index. These waters are not affected by the reaction alk. or acid as to

the B.O.D. factor. A series of org. substances - mannitol, sucrose, glucose, starch, lactic acid, citric acid, aspartagine, histidine, tyrosine, peptone, egg albumin, and humic acid - were compared for their oxidation rates in neutral, acid, and alk. media. In most cases the oxidation was higher in alk. media, except for tyrosine, humic acid, citric acid, asparagine, and creatinine. J. S. Jobb

CH MIKHAYLOVSKAYA L.A.

14

The hydrochemical characteristics of the river Tverka
L. A. Mikhaylovskaia (Hydrochem. Inst., Novocherkassk)
Gidrokhim Materialy (Hydrochem. Materials) 14: 128-130
(1981). Analytical data on 6 samplings during 1979 and
Samplings during 1982
I. N. Ioffe

Mikhaylovskaia, L. A.; Cherkinskiy, S. N.; Zaslavskaya Ye. M.; KHOVANSKAYA, M. G.

Fluorine Contents of Water Sources in the RSFSR Gidrokhim. Materialy, No 21,
1953, 19-23

Investigated the fluorine content of 916 water supply sources throughout
various places in the RSFSR. (RZhKhim, No 7, 1954)

SO: W-31128, 11 Jan 55

Central Sci. Res. Institute of the F.F. Bureau

MIKHAILOVSKA, L. A.

Chemical Abstracts.
May 25, 1954
Biological Chemistry

The exchange of polysaccharides in brain of animals under different states of functioning. B. I. Khalkina, K. O. Gomcharova, and L. A. Mikhailovs'ka (Inst. Biochem., Acad. Sci. Ukr. S.S.R., Kiev). *Ukrain. Biokhim. Zhur.* 24, 39-50 (in Russian, 50-51) (1952).—The activity of several enzymes was measured at various parts of the brains of dogs and rats for normal brain, brains in elec. convulsions, after termination of same and brains in a state of narcosis. In the gray and white marrow of a dog brain, both the phosphorylase (I) and the amylase activities increase in a state of elec. convulsions, which increase is noticed also some time after the end of the convulsions. Such convulsions cause the bound polysaccharide (II) fraction to increase up to 100%, and the free II fraction diminishes. In rats the convulsions were caused by cardiazole, and the whole brain was taken for the detns. The II exchange in both animals shows the same trend. Dog brains show under narcosis with ether (III) or evipan a II synthesis which does not require a primer. The I is much more active in the state of narcosis than in the normal state; phosphorolysis and amylolysis are somewhat lower. The amt. of II under narcosis goes up, and the proportion of bound and free II remains unchanged. Rats were narcotized by aid of III or with hexenal (IV). Narcosis with III does not show any change of the II exchange, but a narcosis by IV shows an increase of the synthesis of II and of the activity of I, which results in a decrease of the amt. of II, because the amt. of free II drops. Thus, narcosis affects the exchange of II in a multiple manner. The diminishing of the nerve functions under the exptl. conditions does not always have the same effects on the dynamics of the II exchange, but the activity of I increases both in the state of convolution and in the state of narcosis. The activity of I, leading to a synthesis of II, is high both in the cases of excitation and depression, whereas the activity of enzymes which split II is lowered in the case of depression. Any influence which diminishes the functioning of the nervous system, leads to an accumulation of the bound II. Werner Jacobson

MIKHAYLOVSKAYA, L. A.

"An Investigation of the Antiketogenic Action of Citric Acid." Cand
Biol Sci, Kiev Veterinary Inst, 24 Dec 54. (PU, 11 Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher
Educational Institutions (12)
SO: Sum. No 556, 24 Jun 55

MIKHAYLOVSKAYA, L. A.

USSR/Biochemistry

Card 1/1

Authors : Kheykina, B. I; Goncharova, E. E., and Mikhaylovskaya, L. A.

Title : Polysaccharide metabolism in the cerebral tissue during various types of excitation of the central nervous system

Periodical : Dokl. AN SSSR, 96, Ed. 2, 347 - 349, May 1954

Abstract : Experiments were made on rabbits to determine the metabolism of polysaccharides in the cerebrum under physiological conditions of excitation which does not lead to attrition of nerve cells. Excitation of the nervous system was attained through subcutaneous injection of pervitin and cardiazol. Obtained results indicate that different pharmacological irritants and the different cycle of their effect on the animal organism produce non-uniform physiological and biochemical effects. Ten references; 8 USSR. Tables.

Institution :

Presented by : Academician A. V. Palladin, March 1, 1954

MEKHAYLOV'S'KA, L.A.

Study of the mechanism of the antiketogenic action of citric acid.
Report no.1: Anaerobic transformation of citric acid in homogenous
extracts of animal liver. Ukr.biokhim.zhur. 28 no.1:47-55 '56.
(MLRA 9:7)

1. Institut biokhimii Akademii nauk URSR, Kiyv.
(CITRIC ACID) (LIVER)

MIKHAYLOVSKAYA, L.A.

Antiketogenic action of citric acid. II. The effect of citric acid and of the members of the tricarboxylic acid cycle on the general metabolism in alloxan-diabetic rabbits. L. A. Mikhaylovskaia (Inst. Biokhim., Acad. Sci. Ukr. S.S.R., Kiev). Ural. Biokhim. Zhur. 28, 483-99 (Russian summary, 499-500) (1958); cf. C.A. 52, 9465a. The study indicates that: (1) The process of anaerobic conversion of citric acid in alloxan diabetes is disturbed; upon incubation of liver homogenates (to which lactic acid was added in order to eliminate the action of isocitric dehydrogenase) in the presence of citric acid, the latter failed to disappear, as would be the case in liver homogenates of normal rabbits. (2) Upon incubation of the liver homogenate of alloxan-diabetic rabbits under conditions similar to the above no acetic acid is formed. It does, however, form if citric acid and insulin are added to the homogenate. (3) The subcutaneous injection of NaOAc into normal rabbits results in an increased elimination of citric acid via the urine. The sugar level of the blood, the ketone bodies and the sugar in the urine remain unchanged. (4) Similar injection of NaOAc into alloxan-diabetic rabbits lowers the excretion of citric acid in the urine and brings about a normalization of the blood sugar level and the excretion of ketone bodies via the urine. Acetic acid stimulates the conversion of citric acid not only in experiments *in vitro*, but also *in vivo*. (5) Experiments with the injection of succinic acid into alloxan-diabetic rabbits showed that succinic acid possesses antiketogenic properties. (6) The simultaneous injection into alloxan-diabetic rabbits of citric and succinic acids, or of acetic and citric acids as their Na salts elicits pronounced antiketogenic effects. (7) The antiketogenic activity of citric acid, to the extent to which it can serve as a source of acetic acid, is related to the oxidative tricarboxylic acid cycle and some other undefined processes of its conversion, which in their turn are in some way dependent upon the

MIKHAYLOVSKAYA, L.A., kand.biol.neuk, NOVOZHILOV, D.A., prof. IVANOV, I.I., prof.

Biochemical studies of the muscle in poliomyelitis and their significance
for the clinician. Ortop.travm. i protez. 19 no.3:28-32 My-Je '58
(MIRA 11:7)

1. Iz nauchno-issledovatel'skogo datskogo ortopedicheskogo instituta
im. G.I. Turnera i kafedry biokhimii Leningr.-skogo meditsinskogo
meditsinskogo instituta.

(POLIOMYELITIS, pathol.
musc., biochem. changes (Rus))

(MUSCLE, pathol.
in poliomyelitis, biochem. changes (Rus))

IVANOV, I.I.; YUR'YEV, V.A.; NOVOZHILOV, D.A.; MIKHAYLOVSKAYA, L.A.;
KRYMSKAYA, B.M.

Biochemical determination of the functional condition of muscles in
poliomyelitis. Vop.med.khim. 5 no.4:243-250 Jl-Ag '59.

(MIRA 12:12)

1. Kafedra biokhimii Leningradskogo pediatricheskogo meditsinskogo
instituta i biokhimicheskaya laboratoriya Nauchno-issledovatel'skogo
detskogo ortopedicheskogo instituta imeni G.I. Turnera.

(POLIOMYELITIS pathol.)
(MUSCLE PROTEINS)

MIKHAYLOVSKAYA, L.V.; MIKHAYLOVSKIY, A.B.

Limits of the stability of drift waves in an inhomogeneous plasma.
Zhur. tekh. fiz. 33 no.10:1200-1205 O '63. (MIRA 16:11)

MIKHAYLOVSKAYA, L. F., Cand of Med Sci -- (diss) "Physiologico-hygienic
characteristics of the industrial training of student-machinists and
molders in metallist trade schools." Khar'kov, 1956, 16 pp (Khar'kov
Medical Institute), 200 copies, (KL, 31-57, 105)

MIKHAYLOVSKAYA, L.V.; MIKHAYLOVSKIY, A.B.

Drift instability of a dense plasma. Zhur. ekspr. i teor. fiz.
(MIRA 17:1)
45 no.5:1566-1571 N '63.

L10834-63

BDS

ACCESSION NR: AP3000746

S/0020/63/150/003/0531/0532

50

AUTHOR: Mikhaylovskaya, L. V.; Mikhailovskiy, A. B.TITLE: Snuydam instability at finite ionic Larmor radiusSOURCE: AN SSSR, Doklady, v. 150, no. 3, 1963, 531-532TOPIC TAGS: finite Larmor radius, plasma in magnetic field, plasma instability, helical magnetic field, magneto-hydrodynamic approximation

ABSTRACT: V. R. Snuydam (Proceedings 2nd International Conference on Peaceful Uses of Atomic Energy, Geneva, 1958; selected reports of foreign scientists, Moscow, 1959, page 89) has shown that plasma retained by a helical magnetic field is unstable with respect to certain periodic perturbations. This result was obtained in a magneto-hydrodynamic approximation when the frequency of perturbations is considerably smaller than the cyclotron ionic frequency, and the ionic Larmor radius is much smaller than the perturbation wavelength. The present work deals with the case of a finite ionic Larmor radius. It is shown that, for a sufficiently large ionic Larmor radius, there is a stabilizing effect on the plasma. "We express our appreciation to V. D. Shafranov for suggesting the problem and for attention to this work. Orig. art. has: 9 formulas.

Card 1/61

I. 28427-66 EWT(1)/T JK
ACC'NR: AP6019115

SOURCE CODE: UR/0016/65/000/011/0061/0065

AUTHOR: Ispolatovskaya, M.V.; Mikhaylovskaya, L.Ya.; Klimacheva, L.V.; Blagoveshchenskiy, V.A.; Larina, T.I.

28
B

ORG: Institute of Epidemiology and Microbiology im. N.F. Gamaleya, AMN SSSR
(Institut epidemiologii i mikrobiologii AMN SSSR)

TITLE: Study on the formation and interaction of enzymes in the toxic Clostridium perfringens complex

SOURCE: Zhurnal mikrobiologii, epidemiologii i immunobiologii, no. 11, 1965, 61-65

TOPIC TAGS: enzyme, bacteria, bacteriology, biochemistry

ABSTRACT: Lecithinase, collagenase, hyaluronidase, and proteinase were present in Clostridium perfringens cells grown from 1½ to 4 hours. Considerable amounts of lecithinase were found in the culture fluid in the course of the experiment. In some experiments collagenase and hyaluronidase were present in the microbial cells but absent in the culture fluid.

Crude exo- and endoproteinases of the pathogen of gas gangrene possessed very low proteolytic activity, while concentrated, highly active proteinases in vitro experiments did not inactivate Clostridium perfringens toxin or lecithinase. Trypsin, however, sharply inactivated both the toxin and purified lecithinase.

Orig. art. has: 2 tables. (JPRS)

SUB CODE: 06/ SUBM DATE: 15Apr64/ ORIG REF: 001/ OTH REF: 002

Card 1/1 UDC: 576.851.555.097.29:577.15

PHASE I BOOK EXPLOITATION

SOV/4271

Akademiya nauk SSSR. Institut fizicheskoy khimii

Issledovaniya po korrozii metallov. [vyp.] 5: Novyye metody i pribory dlya korrozionnykh ispytaniy (Investigations on Corrosion of Metals [No. 5]: New Methods and Instruments for Corrosion Testing) Moscow, Izd-vo AN SSSR, 1959. 176 p. (Series: Its: Trudy, vyp. 7) Errata slip inserted. 3,000 copies printed.

Resp. Ed.: N. D. Tomashov, Doctor of Chemistry, Professor; Ed. of Publishing House: N. G. Yegorov; Tech. Eds: G. A. Astaf'yeva and Ye. V. Zelenkova; Editorial Board: N. D. Tomashov, A. V. Byalobzheskiy, Candidate of Chemistry, and P. V. Shchigolev, Candidate of Chemistry.

PURPOSE: This collection of articles is intended for scientific workers at research institutes and technical personnel of plant laboratories.

COVERAGE: The articles included in this collection deal basically with methods of corrosion investigation which have not yet been published in Soviet periodical

Card 1/6

Investigations on Corrosion (Cont.)

SOV/4271

literature but are of definite interest for studying corrosion processes. A wide range of problems is covered. In addition to the methods discussed the articles provide some experimental data which make possible full utilization of each individual method. No personalities are mentioned. References accompany each article.

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Investigations on Corrosion (Cont.)

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Tugarinov, N.I., and G.S. Moskvichev. Methods of Corrosion Tests in Aggressive Melts 112

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Investigations on Corrosion (Cont.)

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Tyukina, M.N., F.P. Zalivalov, and N.D. Tomashov. Electron-Microscope Investigation of the Microstructure of Anodic Oxidation Films on Aluminum 165

AVAILABLE: Library of Congress

Card 6/6

VK/pw/fal
9-30-60

KLARK, G.B.; MIKHAYLOVSKAYA, M.I.; MIKHAYLOVSKIY, Yu.N.; TOMASHOV, N.D.

Electrochemical method of investigating the atmospheric
corrosion of metals. Trudy Inst.fiz.khim. no.7:11-21 '59.
(Electrochemical analysis)
(Corrosion and anticorrosives--Testing)

S/081/60/006/023/012/02:
A005/A001

Translation from: Referativnyy zhurnal, Khimiya, 1960, No. 23, p. 541, # 94705

AUTHORS: Klark, G.B., Mikhaylovskaya, M.I.

TITLE: The Application of the Capacitance Method to Investigating the Varnish and Paint Coatings on Metals in Electrolytes

PERIODICAL: Tr. In-ta fiz. khimii. AN SSSR, 1959, No. 7, pp. 145 - 154

TEXT: The present methods of investigating the insulation properties of varnish and paint coatings on metals are considered. A theoretical substantiation is presented of the possibility to use the capacitance method of estimating varnish and paint coatings for the investigation of decay process of insulation films on metal surfaces under the action of an electrolyte. It is shown that in so far as the magnitude of capacitance C of an insulated specimen in the electrolyte is determined by the summary area of the uncoated metal, and the magnitude of resistance R of the specimen is connected with the total area of cross sections of the through pores in the insulation, the time variation of these magnitudes can characterize, to a sufficient approximation, the decay of the insulating coating under the

Card 1/2

S/081/60/000/023/021/02.
A005/A001

The Application of the Capacitance Method to Investigating the Varnish and Paint Coatings on Metals in Electrolytes

electrolyte action. An increase of RC during the testing process because of the marked variation of C at constant R is explained by the leakage of the electrolyte ^V through the metal - insulation interface. The time till the beginning of the RC [—] variation serves as indicator of the adhesion properties of the coating on the given metal. The method proposed can be used for estimating the quality and stability of varnish and paint coatings in various corrosion media.

G. Tseytlin

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

S/137/61/000/010/044/056
A006/A101

AUTHORS: Klark, O.B., Berukshits, O.K. Mikhailevskaya, M.I.

TITLE: Corrosion stations of the Institute of Physical Chemistry, AS USSR

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 10, 1961, 43, abstract
101308 ("Tr. In-ta fiz. khimii, AN SSSR", 1960, no. 8, 5 - 13)

TEXT: A map is presented showing the location of corrosion stations of the
Institute of Physical Chemistry, AS USSR. Graphs are given of temperature changes,
air moisture, the number of days with dew and fog, the amount of precipitations,
the velocity of wind and the number of bright days within the location range of
the stations. There are 8 references.

Ye. Layner

[Abstracter's note: Complete translation]

Card 1/1

MUKHAYLOVSKAYA, M.I.; YAKOVLEVA, Y.A.; KLARK, G.B.

Chemical analysis of the air for the content of corrosive components.
Trudy Inst.fiz.khim. 8:56-68 '60. (MIRA 14:4)

(Air—Analysis) (Corrosion and anticorrosives)

AUTHORS:

Kolesnikov, G. S. and Milkaylovskaya, N. N.

79-2-39/58

TITLE:

Derivatives of Hexamethyleneimine. Part 1. Synthesis of N-Alkyl
Derivatives of Hexamethyleneimine (Proizvodnyye Geksametilenimina. 1
Sintez N-alkil proizvodnykh geksametilenimina)

PERIODICAL:

Zhurnal Obshchey Khimii, 1957, vol 27, No 2, pp. 458-460 (U.S.S.R.)

ABSTRACT:

The synthesis of N-alkyl derivatives of hexamethyleneimine was realized by the reaction of hexamethyleneimine with alkyl chloride or alkyl bromides and it was established that alkyl bromides react more smoothly than alkyl chlorides. Simultaneously with the N-alkyl derivatives, the authors also obtained halides of hexamethyleneimine. The intermediate reaction product was a halide of N-alkyhexamethyleneimine which reacted with non-alkylated hexamethyleneimine resulting in the formation of free N-alkylhexamethyleneimine and halides of hexamethyleneimine. It was found that an increase in the molar ratio of the two components from 1:1 to 2:1 increases the yield of N-n-butylhexamethyleneimine from 39 to 75%. The eight different derivatives of N-alkylhexamethyleneimine are listed in a table. All the

Card 1/2

МЕРКУРИЙ: УСАДКА АМ

AUTHORS: Kolesnikov, G. S., Svirnov, A. V., Mironov, L. I., ~~and~~
~~lovanaya, L. M.~~, Stecbo, L. I.

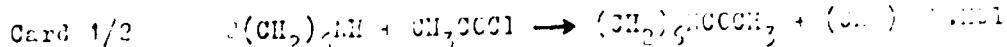
FILE: Derivatives of hexamethylenetetramine. II. Synthesis of the hexamethylenetetraimides of organic acids (Reaction of hexamethylenetetramine with organic acids). II.
Sintez酰胺酸的六甲基己四胺
Sintez酰胺酸的六甲基己四胺

PERIODICAL: Zhurnal Obshchey Khimii, 1, 7, vol. 27, no. 11, p. 2750-2753
(USSR)

ABSTRACT: Contains the following: synthesis of the hexamethylenetetraimides of organic acids; reaction of hexamethylenetetramine with organic acids; characterization of the hexamethylenetetraimides of organic acids; applications of the hexamethylenetetraimides of organic acids. The reaction of hexamethylenetetramine with organic acids is described. The reaction is carried out in the presence of a strong base. The reaction mechanism is discussed. The reaction of hexamethylenetetramine with organic acids is described. The reaction mechanism is discussed.



The hexamethylenetetramine reacts with organic acids in the presence of excess of hexamethylbenzene catalyst.



Derivatives of Hexamethylenimine. II. Synthesis of Hexamethylenimine Derivatives of Carboxylic Acids

In this manner the following carboxylic acids, i.e., benzoic acid, fluoracetic acid, chloroacetic acid, bromoacetic acid, iodooacetic acid, and p-chloroacetic acid (7) were used, as well as o-metacrylic acid and the methanesulfonic acid derivative of methyl acrylate with hexamethylenimine in the presence of pyridine. One of the 12 synthesized hexamethylenimine derivatives was also isolated. Results are in table, and 1 reference, 1961, in SII.

ASSOCIATION: Moscow Chemico-Technological Institute
(Moskovski^z Khimiko-tehnologicheskiy institut)

SUBMITTED: December 3, 1961

AVAILABLE: Library of Congress

1. Hexamethylenimine-Derivatives 2. Hexamethylenamides-Synthesis

Card 2/2

MIKHAYLOVSKAYA, O. G.

Blood preparations in the treatment of epidemic hepatitis. Mauch.
trudy uch. i prak.vrach.Uzb. no.3:88-92 '62. (MIRA 16:2)

1. 1-ya klinicheskaya infektsionnaya bol'nitsa Tashkenta
(nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR prof.
I.K. Musabayev).
(HEPATITIS, INFECTIOUS) (BLOOD—TRANSFUSION)

ACC NR: A-000006 (N)

SOURCE CODE: UR/0399/66/000/006/0064/0069

AUTHORS: Martynov, I. K. (Doctor of medical sciences, Professor); Novskiy, M. V. (Candidate of medical sciences); Kurbatgunov, S. M. (Candidate of medical sciences); Shcheglovskaya, O. G.; Kotyuminskaya, N. A.; David'yan, A. O.

CORG: Uzbek Scientific Research Institute for Epidemiology, Microbiology and Infectious Diseases/Director, Candidate of Medical Sciences K. Yu. Yusupov/, Tashkent (Uzbekskiy nauchno-issledovatel'skiy institut epidemiologii, mikrobiologii i infektsionnykh zabolеваний).

TITLE: Clinical and epidemiological parallels in patients suffering from typhoid or paratyphoid treated with levomycetin in combination with vaccine

SOURCE: Sovetskaya meditsina, no. 6, 1966, 64-69

TOPIC TAGS: bacterial disease, man, antibiotic, vaccine, clinical medicine

ABSTRACT: Effects are compared from observations on 743 patients with typhoid and paratyphoid; 355 were treated with levomycetin and typho-paratyphus B divaccine (first group) and 388 only with levomycetin (second group). The patients were selected at random; 15 cases were mild, 628 moderate and 100 serious. Over half of each group had been vaccinated against these infections in the last 2 years. In addition to the usual symptomatic therapy, levomycetin was given until normal temperatures lasted for

Card 1/2

UDC: 616.927+616.927.7J-085.371-059:615.779.931

L 10041-67

ACC NR: AF6029006

10 days; the first group also received 9 subcutaneous vaccinal injections in increasing doses. Tolerance was satisfactory. Studies of factors of non-specific immunity (properdin level and complement titer) showed a statistically valid higher and more sustained properdin level in the first group and less decline of complement titer at the climax of the disease. Compared to the second group, the first group had a return to normal temperatures $1\frac{1}{2}$ times faster, subfebrile temperatures and complications were half as frequent, and relapses were 1/6 (1/9.5 for typhoid). For a study of the carrier state, epidemiologic observations were conducted once a month for no less than 1 year; in the first group, 2.1% were found chronic carriers of abdominal typhus, in the second 4.7%. It was concluded that combined treatment with antibiotics and subcutaneous vaccine is highly effective and gives nonspecific protection in typhoid fever and paratyphoid. The properdin levels reflect the stage of the diseases, their severity, and the effectiveness of treatment. There were fewer relapses and fewer carriers. The treatment is recommended for typhoid fever. For paratyphoid A and B, better means and methods are required, in particular possible application of the corresponding monovaccines. Orig. art. has: none.

SUB CODE: 06 ~~07~~/ SUBM DATE: none/ ORIG REF: 012

BLAGOVIDOV, N.L.; SIMAKOV, V.N.; PONOMAREVA, V.V.; MARCHENKO, A.I.;
ALEKSANDROVA, L.N.; SOKOLOV, N.N.; ROZHNOVA, T.A.; TSYGANEKO,
A.F.; MIKHAYLOVSKAYA, O.N.; PETROV, A.P.; KHANTULEV, A.A.;
SAPOZHNIKOV, N.A.

Zinaida Iul'evna Shokal'skaia obituary. Izv. Vses. geog. ob-va
93 no.4:347-348 J1 - Ag '61. (MIRA 14:7)
(Shokal'skaia, Zinaida Iul'evna, d. 1961)

GUTERMAN, V. .; GADZHOV, I.Ye.; KAROL'KIN, Yu., preniali u neschiye: Z LIKAN,
I.P.; ISTRIK, I.I.; KUDRIKOV, N. . ., KUDRIKOV, V.S.; LIKHAYLOVSKAYA, S.S.;
GRINBERG, A.Ya.; LIKAN, I..

Raising the wear resistance of equipment parts operating in a hydraulic
abrasive medium. Ural'gipromtehnologicheskii
(T A R T I C H)

1. Vsesoyuznyy machine-instrumental'nyy i proyektno-tehnicheskii
institut ugol'nogo mashinostroyeniya.

MIKHAYLOVSKAYA, T.A. (Moskva)

Francis Bacon and medical problems; on the 400th anniversary of his birth. Sov.zdrav. 20 no.4:51-55 '61. (MIRA 14:5)
(BACON, FRANCIS, 1561-1626)

MIKHAJLOVSKAYA, T.A. (Moskva)

Medical problems in the works of Hegel. Sov.zdrav. 21 no.12:25-
31 '62. (MIR 15:12)

(MEDICINE--PHILOSOPHY)
(HEGEL, GEORG WILHELM FRIEDRICH, 1770-1831)

MIKHAYLOVSKAYA, T.A.

Joseph Priestley and natural science in the 18th century. Nauch.
rab. asp. i klin. ord. no.6:309-334 '60. (MIRA 14:12)

1. Kafedra marksizma-leninizma (zav. dotsent Yu.V.Borisov) i kafedra
istorii meditsiny (zav. dotsent P.Ye.Zabladovskiy) TSentral'nogo
instituta usovershenstvovaniya vrachey.
(PRIESTLEY, JOSEPH, 1733-1804) (SCIENCE)

5.3610

11/20/86
SCV/77-1-201-240-17R

AUTHORS: Khmel'ntskaya, I. L., Efimovskaya, L. A., Mikhaylova, T. A.

TITLE: Concerning the Reaction of 2,4-Toluylene Diisocyanate With Water

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 7, pp. 581-583
(USSR)

ABSTRACT: According to patents, a reaction of 2,4-toluylene diisocyanate with an equimolar amount of water yields 3,3'-dilaceyanoc-4,4'dimethylcarbanilide.

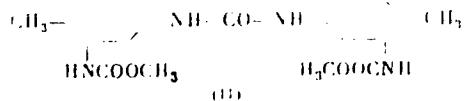


Card 24

Concerning the Reactions of 2,4-Toluylene Diisocyanate With Water.

77894
SOV 779-30-2-45 478

Only melting temperatures were given for the compound and structural formulas were not substantiated by experiments. The authors found that the above reaction yields a mixture of compounds, the melting temperature of which differs from the one given in patents by 5 to 10° C. i.e. compound which by its chemical composition corresponds to 3,3'-diisocyanato-4,4'-dimethylcarbodiide (I) was treated with methanol and converted to corresponding diurethane (II) (mp 220-220.5° C.).

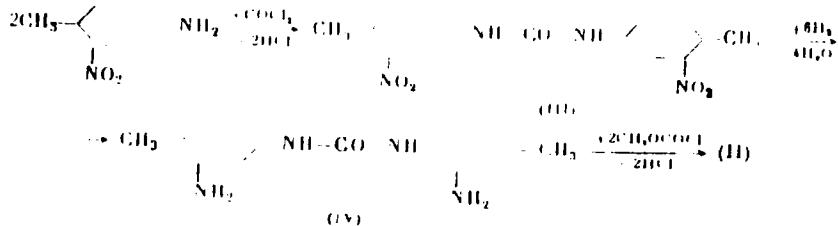


An identical urethane was obtained by parallel synthesis according to the following diagram.

Card 2/4

Concerning the Reactions of 2,4-Tolylene
Diisocyanate With Water

77894
SOV/79-30-2-45/78



The urea derivative (IV) with amino groups in 3,3' position was not previously described in the literature. Authors obtained (IV) (mp 230 ° C) by reducing (III) with hydrogen in the presence of Raney nickel. The diamine (IV) was treated with methyl chloroformate to yield corresponding diurethane which was identical with the diurethane obtained from (I). This proves the structure of (I). There are 4 references, 1 Soviet 2 U.S., and 1 French. The U.S. references are: U.S Patent 2757185, 2757184; D. Simons, R. Arnold, J. Am.

Card 3/4

Concerning the Reactions of 2,4-Toluylene
Diisocyanate With Water

77894
SOV/9-30-2-45,78

Chem. Soc., 78, 1658 (1956).

ASSOCIATION: Scientific Research Institute of Organic Intermediates
and Dyes imeni K. Ye. Voroshilov (Nauchno-issledovatel's-
skiy institut organicheskikh polaproductov i krasitelye-
imeni K. Ye. Voroshilova)

SUBMITTED: October 20, 1958

Card 4/4

IVANOVA, G.M.; MIKHAYLOVSKAYA, T.A.

Determining live and dead cells in the cultures of the blue-green
algae Anabaena variabilis and *Amorphomostoc punctiforme* by the use
of triphenyltetrazole chloride. Biul. MOIP. Otd. biol. 67 no.3:151
(MIRA 15:11)
My-Je '62.
(Tetrasodium compounds) (Algae--Cultures and culture media)

NIKHAJLOVSKAYA, T. I.

"Medicinal Plants of the Eastern Foothills of the Southern Urals (Based on a Study of the Flora of the Il'chen State National Forest imeni V. I. Lenin)." Cani Biol Sci, Khar'kov Pharmaceutical Inst, Khar'kov, 1953. (RZ. Biol., No 1, Ser. 5.)

SC: Sum 432, 2- Mar 55

MILAYLOVSKAYA, T.I.

Study on the anatomy and microchemistry of Nonnea pulla (L.) D.C.
Apt.delo 7 no.6:12-15 N-D '58 (MIRA 11:12)

1. Iz kafedry botaniki Khar'kovskogo farmatsevticheskogo instituta
Ministerstva zdravookhraneniya USSR.
(NONNEA)

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134110009-1

United States, U.S.

"The action of the Black sailors of the Soviet Navy against the American
fleet in the Pacific Ocean, while it may be justified, is not in accordance
with the principles of international law," said the Foreign Ministry of the
U.S.S.R., Moscow, 19.3.1971. (UPI Photo/Moscow Press Photo)

APPROVED FOR RELEASE: 06/14/2000

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134110009-1"

"Data on the Biochemistry of Phosphorus Compounds of Strains of Aspergillus niger and Actinomyces violaceus, Producers of Antibiotics," by T. Ts. Mikhaylovska, Chair of Biochemistry at the Kharkov Medical Stomatological Institute, Ukrainskiy Biokhimichniy Zhurnal, Kiev, Vol 28, No 4, 1956, pp 465-473

Investigations of phosphorus metabolism of the fungus *Aspergillus niger* which produces the antibiotic aspergillin, and of the fungus *Actinomyces violaceus* which produces the antibiotic mycetin, established: the micella of both contain fractions of phosphorus compounds some of which are soluble in acid; the phosphorus compounds of *Aspergillus niger* and *Actinomyces violaceus* which are insoluble in acid contain fractions of alkali-hydrolyzable phosphorus compounds; the phosphorus compounds of *Aspergillus niger* which are soluble in acid contain adenosine triphosphoric acid and the enzyme adenosinetriphosphatase; the micella of *Aspergillus niger* and *Actinomyces violaceus* contain phosphorylated intermediate products of the metabolism of carbohydrates. This permits the assumption that carbohydrate metabolism in these fungi takes place with the participation of phosphoric acid.

SYCHEV, N.A., prof. (Khar'kov); MIKHAYLOVSKAYA, T.S., kand.biol.nauk
(Khar'kov); BOLOTINA, Z.L. (Khar'kov); MALIKOVA, N.Ya., kand.
med.nauk (Khar'kov); GOL'DOVA, T.G. (Khar'kov)

Active acidity and content of pyruvic acid in the saliva of
patients with paradentosis. Probl.stom. 4:89-92 '58.

(MIRA 13:6)

(PYRUVIC ACID) (GUMS--DISEASES)

MIHAYLOVSKAYA, T.S., kand.med.nauk (Khar'kov); SYCHEV, N.A., prof.
(Khar'kov); MALIKOVA, N.Ya., kand.med.nauk (Khar'kov)

Study of the phosphorus compounds and calcium in the saliva
in parodontosis. Probl.stem. 4:93-97 '58. (MIRA 13:6)
(GUMS--DISEASES) (PHOSPHORUS--ANALYSIS) (CALCIUM--ANALYSIS)

BOLOTINA, Z.L. (Khar'kov); OLYNSKIY, S.M. (Khar'kov); MIKHAYLOVSKAYA, T.S. (Khar'kov); SYCHEV, N.A. (Khar'kov)

Disorders of vitamin C metabolism in periodontosis. Probl. stom.
6:79-85 '62. (MIRA 16:3)
(GUMS—DISEASES) (ASCORBIC ACID) (METABOLISM, DISORDERS OF)

MIKHAYLOVSKAYA, V.A.; SHISHKIN, B.K., red.; LUPINOVICH, I.S., red.;
TOMIN, M.P., red.; ALEKSANDROVICH, Kh., tekhn.red.

[Flora of the Polesye Lowlands] Flora Polesskoi nizmennosti.
Minsk, Izd-vo AN BSSR, 1953. 453 p. (MIRA 11:5)

1. Chlen-korrespondent AN SSSR (for Shishkin). 2. Deystvitel'nyy
chlen AN BSSR (for Lupinovich). 3. Chlen-korrespondent AN BSSR
(for Tomin)
(Polesye--Botany)

MISHAYLOVSKAYA, V.A.

On the occurrence of *Baldellia Ranunculoides* (L.) Parl. in White
Russia. Bot. mat. Gerb. 18:20-21 '57. (MLRA 10:6)
(Pinsk District--Water plantain)

MIKHAILEVSKAYA, V. [Mikhailevskaia, V.]

New and rare plants in the flora of White Russia. Vestsi AN BSSR.
Ser.biial.nav. no.3:11-15 '58. (MIRA 11:11)
(White Russia--Botany)

TOMIN, M.P., akademik; KOZLOVSKAYA, N.V.; KRUGANOVA, Ye.A.; MIKHAYLOVSKAYA, V.A.; TSETTERMAN, N.O.; SHISHKIN, B.K., glavnayy red.; BULAT, O., red.izd-va; VOLOKHANOVICH, I., tekhn.red.

[Flora of the White Russian S.S.R.] Flora BSSR. Minsk. Vol.5.
1959. 266 p. (MIRA 13:1)

1. Akademija navuk Belaruskoi SSR. Minsk. Instytut biologii.
2. Zaveduyushchiy otdelom flory i gerbariya Instituta biologii AN BSSR (for Tomin). 3. Institut biologii AN BSSR (for all except Shishkin, Bulat, Volokhovich).

(White Russia--Compositae)

MIKHAYLOVSKAYA, Vera Arsen'yevna; KOZLOVSKAYA, Nataliya Vital'yevna;
GONCHARIK, M.N., doktor biol. nauk, red.; ZAYTSEVA, T., red.
izd-va; TURTSEVICH, L., tekhn. red.

[Poisonous and harmful plants] Iadovitye i vrednye rasteniiia.
Minsk, Izd-vo Akad. nauk BSSR, 1962. 116 p. (MIRA 15:8)
(White Russia—Poisonous plants)

MIKHAYLOVSKAYA, V.A. [Mikhailouskaia, V.A.]; KOZLOVSKAYA, N.V.
(Kozlouskaia, N.V.)

Ecology and geography of the medicinal flora of White Russia.
Vestsi AN BSSR Ser. biial. nav. no.1:13-20'63. (MIRA 16:9)
(WHITE RUSSIA—BOTANY, MEDICAL)

YURKEVICH, I.D., red.; MIKHAYLOVSKAYA, V.A., red.; NESTEROVICH,
N.D., red.; RAKHTEYENKO, I.N., red.; SHOLYAK, L.P.,
red.; YAKUSHEV, B.I., red.

[Effect of soil conditions on the growth of woody plants]
Vliyanie pochvennykh usloviy na rost drevesnykh rastenii.
Minsk, Izd-vo "Nauka i tekhnika," 1964. 113 p.

(MIRA 17:5)

MIKHAELOVICH KAYA, V. I.

MIKHAILOVICH KAYA, V. I. "On the casuistics of meningitis", Sbornik nauch. trudov Otolaringol. kliniki (Kuban. med. in-t im. Krasnoy Armii), Krasnodar, 1942, p. 44-45.

SC: U-3261, 10 April 53 (Leto; is - Zhurnal 'nykh statey No. 11, 1941)

Potential measurements under conditions preventing diffusion in the formation of alloys. N. S. Formanov and V. I. Mikhalevskaya. Mem. Inst. Chem., Ukrainsk. Akad. Nauk, 6, 41-7 (1937); Chem. Zentralbl. 1938, II, 285-6.
By use of the cell Al-AlBr₃ + KBr-Cu, a method was developed for measuring the potential of the cell in the formation of alloys in salt melts. The method is based on the principle that a sufficiently great resistance is placed in the external circuit so that the process of alloy formation proceeds while the retarding action of diffusion is prevented. In this way it can be demonstrated that the e.m.f. not only decreases but may even increase, depending upon which region of the phase diagram of the given system corresponds to the alloy formation.

M. G. Marin

ABE-LA METALLURGICAL LITERATURE CLASSIFICATION

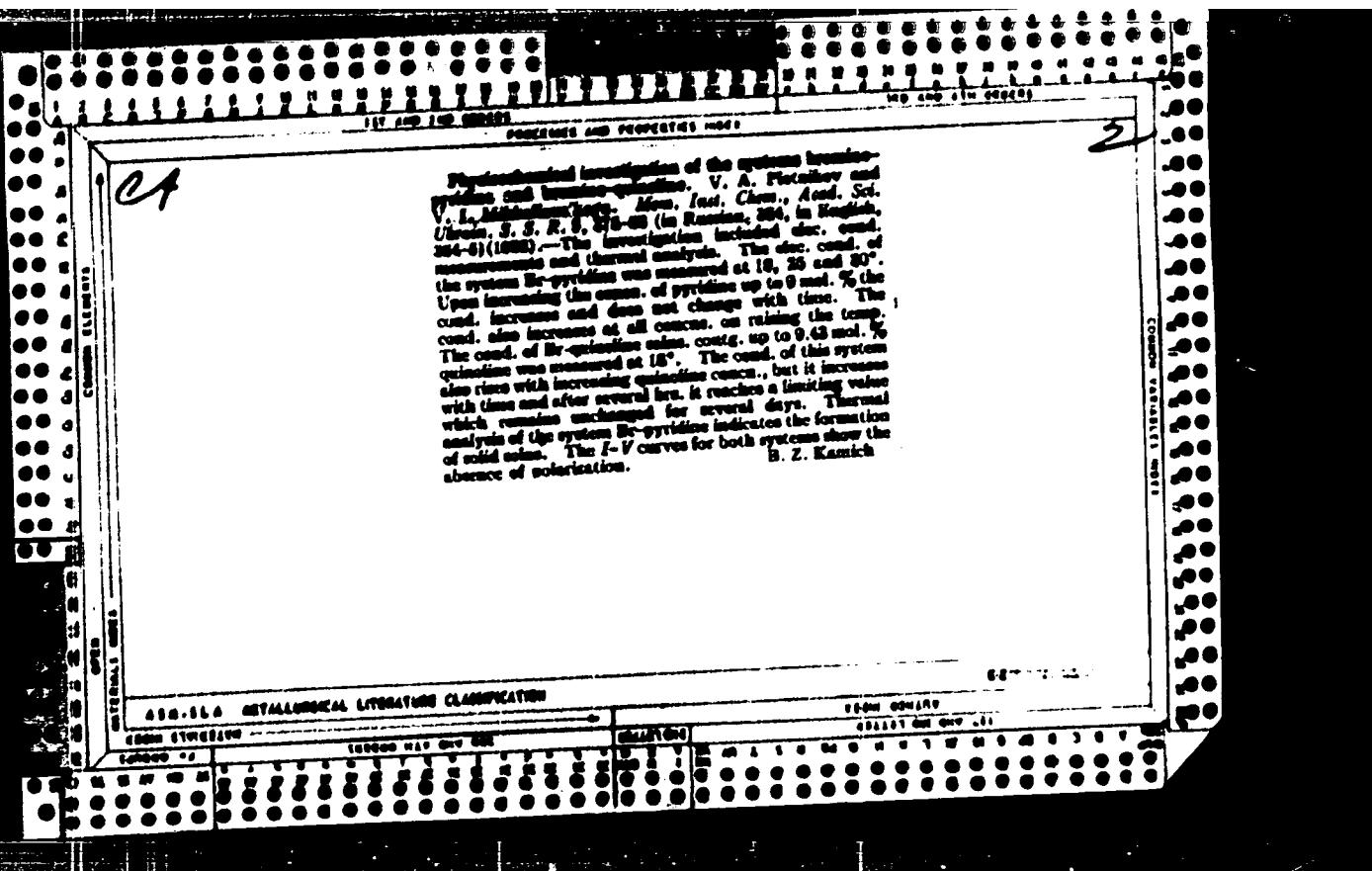
SCANNED BY COMPUTER

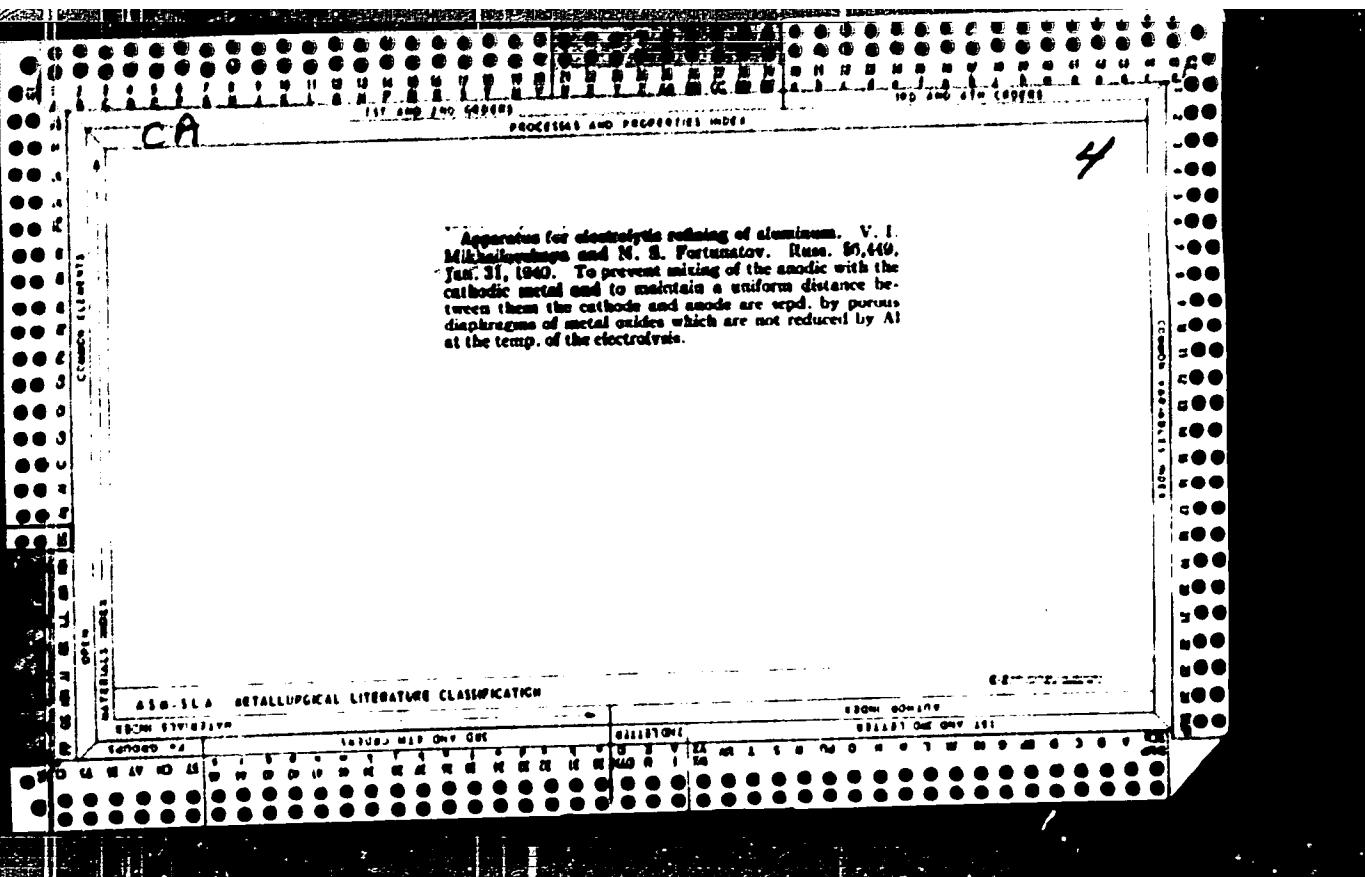
SEARCHED 1/2 10/10/83 MAP ONV GCF

SEARCHED 1/2 10/10/83 MAP ONV GCF

SEARCHED 1/2 10/10/83 MAP ONV GCF

Con
RECEIVED AND INDEXED 6/14/2000
A. B. ODEONOV
Compounds of aluminum bromide with the bromides of
silver and potassium. V. A. Plotnikov and V. I. Mikhail-
lovskaya. *Mos. Inst. Chem., Ukr.* Acad. Nauk.
No. 2, 121-24 (1967). The complexes AlBr_3AgBr m
175° and AlBr_3KBr m 170-173° were obtained by crystal-
lization from Et_2O and PhCl , resp. B. Z. Kamenev





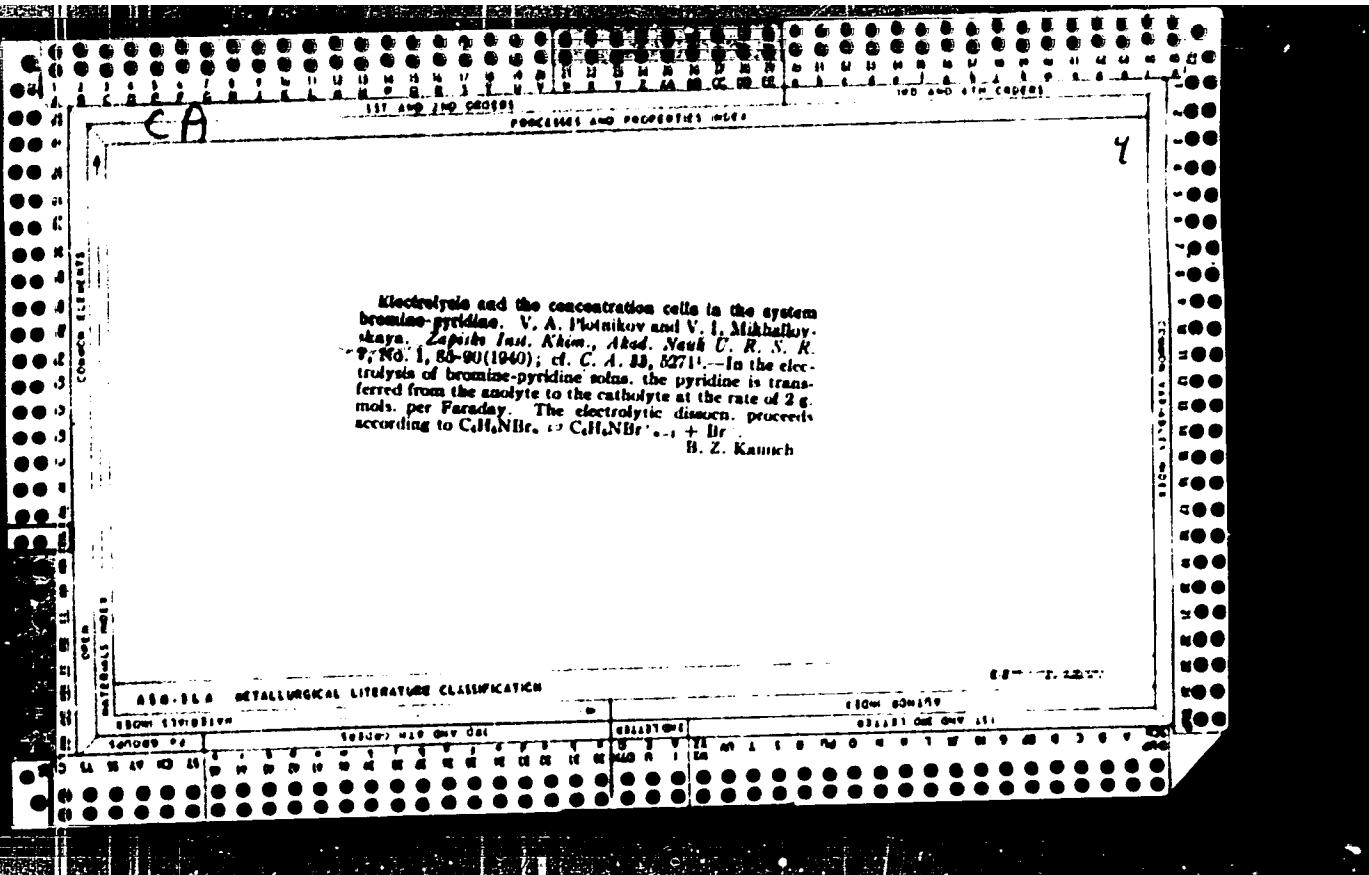
ca

9

Determination of the oxidation velocity constants for molten iron oxidized with pure oxygen. N. S. Fortunatov and V. I. Mikhalkovskaya. *Memo. Inst. Chem. Acad. Sci. Ukrainsk. SSR*, No. 2, 53-91 (in Russian 1962, in English 92) (1941).—The process of oxidation was studied by passing a stream of pure O₂ against the surface of molten iron at different temps. at rates so as not to cool the metal surface. The O₂ is absorbed and diffuses through the oxide layer. The oxide layer does not impede the absorption.

at temps. above 1700°. From 1365° to 1650° $K \times 10^4$ increased from 6.78 to 29.71, whereas from 1700° to 1750° $K \times 10^4$ increased from 274 to 391. B. Z. K.

AIA 11A METALLURGICAL LITERATURE CLASSIFICATION



MIRNAYLOVSKAYA, V. F.

Chem (4)

Chemical Abst.
Vol. 48 No. 5
May 10, 1959
Electrochemistry

Anodic solution potentials of metal sulfides. N. S. Fortunatov and V. I. Chishikov. Ukar. Khim. Zbir. 16, 647-81 (1951) (in Russian).—Artificial pure sulfides of Fe, Ni, Co, Cu, Sn, Pb, Sb, Mo, and Ag were subjected to anodic soln. in a satd. NaCl soln. at 20 and 60°. The results are given in diagram and tabular form. A diagram of the elec. circuit is given. The potentials with and without electrolysis were measured at different e.d.s. against a platinel electrode. For comparison, the potentials of the elemental metals were detd. Wherever possible, electrolysis was continued up to the evolution of Cl. In all cases elemental S was produced. The potentials of the metals and corresponding sulfides at 20° without electrolysis were: Fe, -0.840, -0.019; Ni, -0.228, -0.330; Co, -0.30, +0.246; Cu, -0.174, +0.234; Sn, -0.450, -0.460 Pb, -0.604, -0.610; Sb, -0.200, -0.134; Bi, -0.214, -0.160; MoS₂, +0.100; Ag₂S, -0.036. The use of NaCl as a medium was preferred to sulfates because the chlorides of most metals were sol. The conclusion of Ustiushev and Chishikov (C.A. 44, 3816c) that the potential depended on time was obviously erroneous. Sulfide anodes were covered by a hard layer of S which acted as an elec. diaphragm. [R]

MIKHAYLOVSKAYA, V. I.

4

✓ Separation of a small quantity of cobalt from solutions.
N. S. Fortunatov, Yu. P. Nazarenko, and V. I. Mikhaylovskaya. Zhur. Obshchey Khim. 25, 620-624 (1955). From
a sulfate soln. contg. 110 g. of Zn, 1.25 g. Mn, and 5 mg. Co per l., Co and Mn were pptd. in the presence of oxidizing agents such as KMnO₄, KClO₃, or K₂S₂O₈, with ZnO. Complete pptn. of Co depends on the excess of oxidizing agents and the complete pptn. of Mn. Ten ml. of the soln. treated with ZnO and an excess of the oxidizing agent, and heated at 70° on the water bath for 80 min. yielded 99% of the Co in the ppt. Completeness of pptn. was verified by means of radioactive Co⁶⁰. Also in J. Gen. Chem. U.S.S.R. 25, 620 (1955) (Engl. translation).

N. Charmandarian

H BI

Inst. Gen. & Inorg. Chem. AS USSR

FORTUNATOV, N.S.; MIKHAYLOVSKAYA, V.I.; NAZARENKO, Yu.P.

Separation of cobalt and nickel. Ukr.khim.zhur. 22 no.4; 536-541
'56. (MIRA 10:10)

1.Institut obshchey i neorganicheskoy khimii AN USSR.
(Cobalt) (Nickel)

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134110009-1

NIKOLAYLOVSKAYA, V.V.

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FBI - LOS ANGELES
(M.J.L.)

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134110009-1"

IMYANITOV, I.M.; MIKHAYLOVSKAYA, V.V.; ZIGANOV, N.P.; STREL'TSOVA, M.B.

Instrument for prolonged measurement of the intensity of an atmospheric electrical field in complex meteorological conditions. Izv.AN SSSR, Ser.geofiz. no.9:1121-1127 S '56.

(MLRA 9:12)

1. Glavnaya geofizicheskaya observatoriya imeni A.I. Voeykova.
(Atmospheric electricity)

SCV/120-58-2-21/37

AUTHORS: Ilyanitov, I. M. and Mikhaylovskaya, V. V.

TITLE: An Aeroplane Instrument for Measuring the Charges on
Precipitation Particles (Samoletnyy pribor dlya izmereniya
zaryadov chastits osadkov)

PERIODICAL: Pribory i Tekhnika Eksperimenta, 1956, Nr 2 pp 86-91
(USSR)

ABSTRACT: In order to explain the mechanism of electrification of clouds and the production of electrostatic fields in the atmosphere it is necessary to know the charges on precipitation particles. Measurements of such charges near the Earth's surface do not yield the true values which obtain in clouds since these charges change as the particles fall towards the Earth's surface. It is therefore necessary to measure these charges in the clouds, or under the clouds. In the present paper an induction device is described. The instrument consists essentially of two rings (Fig.2). They are placed at such a distance that drops which come into contact with the first ring either do not pass through the second one or induce a pulse in the second ring which is different in form from that induced in the first ring. This arrangement separates out all the drops which have

Card 1/3

30V/120-58-2-21/37

An Aeroplane Instrument for Measuring the Charges on Precipitation Particles.

not been affected by the apparatus. In order to screen the two rings from the effects of external fields the rings are placed inside a grounded metallic conical screen. The circuit which detects and amplifies the signal induced by the charged drops in the ring system is shown in Fig.3. The electronic circuit consists of a preamplifier and a four-tube main amplifier. The latter is a three-stage circuit with a transformer output. With a maximum signal at the input, the circuit delivers 100 mamp through a load of 2.4 ohms at the output. The instrument measures charges in the range $\pm 5 \times 10^{-4}$ to ± 1.0 CGSE. It may be used from an aeroplane in cases where particle concentration is less than 10^{-3} cm^{-3} . It can work in the temperature range -30° to $+25^\circ$ and in 100% humidity without changes in

Card 2/3

SOV/120-58-1-1/57

An Aeroplane Instrument for Measuring the Charges on Precipitation Particles.

its parameters. There are 6 figures, no tables and 5 references, 2 of which are English and the rest Soviet.

ASSOCIATION: Glavnaya geofizicheskaya observatoriya (Main Geophysical Observatory)

SUBMITTED: January 21, 1957.

1. Clouds--Electrical properties 2. Particles--Properties
Card 3/3 3. Electric fields--Measurement 4. Electrometers--Applications

IMYANITOV, I.M., MIKHAYLOVSKAYA, V.V.

Studying the electrical charge of precipitation particles in the
free atmosphere. Trudy GGO no.97:16-33 '60. (MIRA 13:8)
(Atmospheric electricity) (Rain and rainfall)

ACCESSION NR: AT4040537

S/2531/64/000/157/0048/0053

AUTHOR: Mikhaylovskaya, V. V.

TITLE: Theory of measurement of raindrops by the acoustic method

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy⁴, no. 157, 1964.
Atmosfernoye elektrичество (Atmospheric electricity), 48-53TOPIC TAGS: atmospheric electricity, meteorology, meteorological instrument,
raindrop

ABSTRACT: The acoustic method is the most satisfactory means for measurement of the dimensions of large raindrops; experience with this method as reported in Soviet and foreign literature is reviewed. It is noted, however, that it is desirable to find a formula relating the voltage of the plates of a pressure-sensitive element to the diameter and velocity of a drop. Special experiments were formulated for this purpose. Fig. 1 of the Enclosure is a diagrammatic representation of the experiment. Charged drops from a capillary passed through an induction coil and fall on the surface of the sensor. The sensor was a polished steel plate 6.6 cm in diameter and 0.5 cm in thickness with barium titanate elements glued underneath. Massive steel columns were glued to the elements. The plate was put into a cylindrical housing; a rubber gasket was included.

Card 1/5

ACCESSION NR: AT6040537

basis of the interval between the signals of the sensor and induction coil it is possible to determine the velocity of the drop, since the distance between them is known. A vibrator with a frequency of 500 cps was used in the loop oscillograph for marking the time on the tape. Errors did not exceed 5%. Drop diameters are determined by weighing 100 drops. Relative humidity during the experiments was close to 100%; evaporation therefore could be neglected. Drops ranged in size from 2.5 to 5 mm. It was established that the amplitude of the signal (U) from the sensor is linearly dependent on velocity v (Fig. 2 of the Enclosure) and the square of the diameter d (Fig. 3 of the Enclosure) of the falling drop, that is

$$U = v d^2 \quad (1)$$

The scattering of points in the figures is due to measurement errors. The author then analyzes the measurement errors and change in sensitivity of the sensor (in the range $\pm 10\%$) as a function of the point of falling of the drops. The theory of this problem is discussed further and additional relationships analyzed. Orig. art. has: 8 formulas, 4 figures and 1 table.

ASSOCIATION: Glavnaya geofizicheskaya observatoriya (Main Geophysical Observatory)

SUBMITTED: 00

DATE ACQ: 02Jul64

ENCL: 03

Card 2/5 SUB CODE: ES

NO REF Sov: 011

OTHER: 018

ACCESSION NR: AT4040537

ENCLOSURE: 01

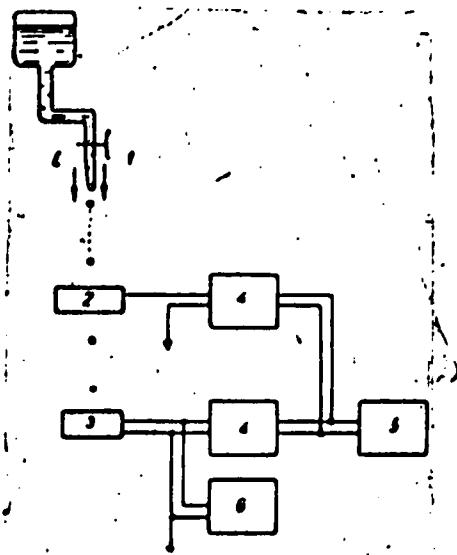


Fig. 1. Diagram of experiment. 1 - capillary; 2 - induction coil; 3 - sensor;
4 - amplifier; 5 - 1-cm oscilloscope; 6 - electronic oscilloscope.

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ENCLOSURE: 02

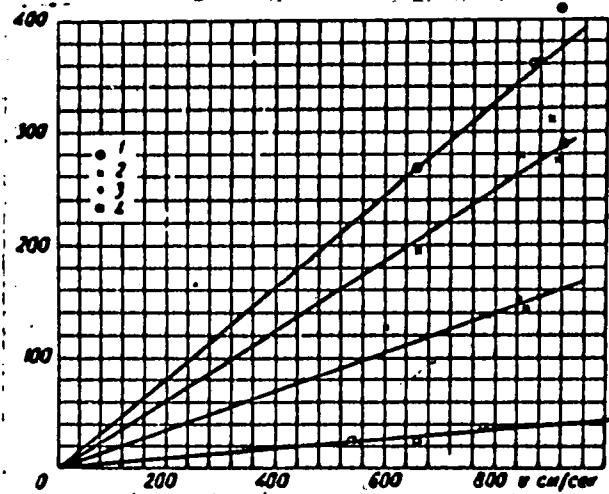


Fig. 2. Dependence of sensor voltage on velocity of falling of drops. Drop diameter: 1 - 5.26 mm; 2 - 4.56 mm; 3 - 3.64 mm; 4 - 2.76 mm

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ACCESSION NR: AT4040537

ENCLOSURE: 03

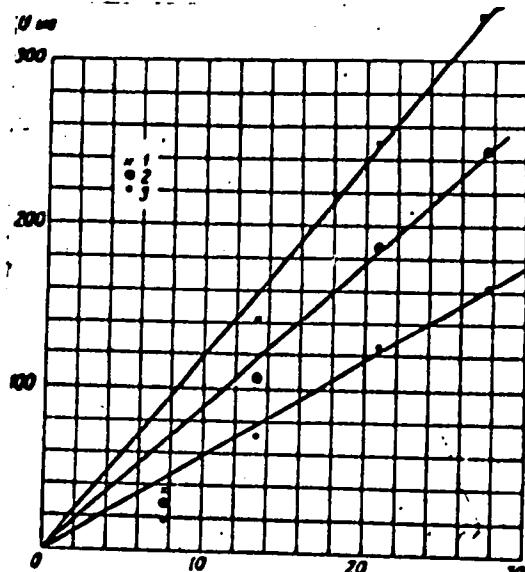


Fig. 3. Dependence of sensor voltage on square of diameter of impacting drop.
Velocities: 1 - 800 cm/sec; 2 - 600 cm/sec; 3 - 400 cm/sec.

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GOR'KIN, Z.D.; KARMINSKIY, M.S.; MIKHAYLOVSKAYA, Ye.F.; AL'BITSKAYA, Ye.S.;
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18-22 D '53. (MLRA 6:12)

1. Iz Khar'kovskogo meditsinskogo instituta i remeslennogo uchili-shcha no. 4.
(Technical education--Curricula) (Fatigue)

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